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### IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

LEON DE BEER : EXAMINER: IQBAL, K.

SERIAL NO: 09/869,295 :

FILED: JULY 18, 2001 : GROUP ART UNIT: 2686

FOR: APPARATUS AND METHOD FOR

**ROUTING COMMUNICATIONS** 

#### APPEAL BRIEF

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal of the final Action mailed May 17, 2005, that presented a final rejection of Claims 1, 3-9, 11-48, 50, 51, 53-77, 79-83 and 85-88. A Notice of Appeal was timely filed with a three month extension on November 17, 2005.

# I. REAL PARTY IN INTEREST UNDER 37 C.F.R. § 41.37(c)(1)(i)

The real party in interest in this appeal is the Assignee, INTEROUTE

COMMUNICATIONS LIMITED, having a place of business at Barnard's Inn, 86 Fetter

Lane, EC4A 1EN, London, United Kingdom.

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### II. RELATED APPEALS AND INTERFERENCES UNDER 37 C.F.R. § 41.37(c)(1)(ii)

Appellant, Appellant's legal representative, and the Assignee are aware of no appeals that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

#### III. STATUS OF THE CLAIMS UNDER 37 C.F.R. § 41.37(c)(1)(iii)

Claims 1, 3-9, 11-48, 50, 51, 53-77, 79-83, 85-88 and 90 are pending in this application. Claims 1, 3-9, 11-48, 50, 51, 53-77, 79-83 and 85-88 have been finally rejected and form the basis for this appeal. Claims 2, 10, 49, 52, 78, 84 and 89 were previously canceled. The attached claim appendix includes a clean copy of appealed Claims 1, 3-9, 11-48, 50, 51, 53-77, 79-83, 85-88 and 90.

## IV. STATUS OF THE AMENDMENTS UNDER 37 C.F.R. § 41.37(c)(1)(iv)

An amendment is filed herewith to amend Claim 64 to properly depend from Claim 48; add Claim 90 to recite features of previously canceled Claim 49; and amend Claims 50 and 51 to properly depend from Claim 90. No other amendments have been filed after the final rejection mailed May 17, 2005.

# V. SUMMARY OF THE CLAIMED SUBJECT MATTER UNDER 37 C.F.R. § 41.37(c)(1)(v)

Claim 48 is directed to a mobile telephone in a cellular telephone communications system in which a plurality of service providers provide respective alternative communications channels within the cellular telephone communications system. For example, see Appellant's Figure 1 showing a cellular telephone communication system with three service providers that provide respective alternative communications channels

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4A/8A/5A, 4B/8B/5B and 4C/8C/5C, as described in the specification at page 7, line 28, to page 8, line 14. The mobile telephone includes a look-up table storing routing information, such as the least cost routing means (LCRM) 3 of mobile telephone 1, as described in the specification at page 10, lines 16-17, and page 11, lines 24-29. The look-up table is populated with data in the form of preferred route codes. Each preferred route code is representative of a preferred route for connection to a respective call destination, for example as described in the specification at page 32, lines 6-10. The preferred route codes comprise results of a route selection decision by a control centre (e.g., control centre 7) remote from the mobile telephone, for example as described in the specification at page 10, lines 14-17 and at page 11, lines 10-29.

Further, the mobile telephone includes input means (e.g., keypad 130) for originating an outgoing telephone call by the input of user generated call destination information, for example as described at page 14, lines 10-19, page 15, lines 1-5, and at page 22, line 26 to page 23, line 8.

In addition, the mobile telephone includes accessing means (e.g., selector 133) for accessing the look-up table using an address determined at least in part by the call destination information to obtain a selected preferred route code, for example as described at page 15, lines 1-5, and lines 17-22, and at page 31, lines 19-24 and as shown in Figure 12. The mobile telephone also includes channel selecting means (e.g., channel selector 300) for selecting one of the communication channels in accordance with the preferred route code, for example, as described at page 15, lines 9-15. The mobile telephone may includes communication means (e.g., transmitter circuit 509) for establishing communication for the outgoing telephone call for a call destination (e.g., phone 2) corresponding to the call destination information via the selected communication channel of a corresponding service provider may be done, for

example, as shown in Appellant's Figure 7, step 74, and as described in the specification at page 22, line 27 to page 23, line 29.

In addition, the mobile telephone includes scanning means (e.g., transmitter/receiver circuit 509, RAM 502 (including LUTs 134/135), ROM 501, CPU 500 and SIM card 505) for periodically scanning received transmissions to identify available communication channels for which the mobile telephone has functional capability, for example, as shown in Appellant's Figure 6 and as described in the specification at page 18, lines 1-4. An example of attempting to complete a registration procedure for each available channel is shown in Figure 6 and described at page 18, lines 5-8.

In particular, the channel selecting means is operable to perform selection from those available channels of the cellular telephone communications system for which registration is completed. For example, LCRM 3 information may be updated with information regarding newly available channels, as described in the specification at page 19, lines 11-26, available channel information may be stored in the table, as described at page 27, lines 19-23, and the selecting may be performed based on channels that are available, as described at page 33, lines 14-17, and as shown in Appellant's Figure 12, steps 1206, 1207 and 1208.

The subject matter of independent method Claim 1 essentially parallels that of independent Claim 48 as fully outlined above. Further, Claim 1 does not include the "means" recitations found in Claim 48.

Independent Claim 83 is directed to a portable storage medium for use in a mobile telephone. The storage medium stores a look-up table, such as, for example, the least cost routing means (LCRM) 3 of mobile telephone 1, as described in the specification at page 10, lines 16-17, and page 11, lines 24-29. The look-up table is populated with data in the form of preferred route codes, each preferred route code being representative of a preferred route for connection to a respective call destination, for example as described at page 32, lines 6-10.

The preferred route codes comprise results of a route selection decision by a control centre (e.g., control centre 7) remote from the mobile telephone, for example as described at page 10, lines 14-17 and page 11, lines 10-29.

Further, dependent Claim 5 is directed to the method of Claim 1 wherein the preferred route codes further determine a choice of a further network for forward connection. For example in Appellant's Figure 1, after one of the cellular networks 8a, 8b or 8c is selected, routing to a destination telephone 2 is made via any one of a number of conventional telephone networks 5a, 5b and 5c. That routing information not only determines which of the cellular networks is selected, but determines which of the conventional telephone networks is preferred.

In addition, dependent Claim 7 is directed to the method of Claim 1 wherein the mobile telephone adds a prefix code (e.g., as shown in Appellant's Figure 4 and as described at page 9, line 14 to page 10, line 3) to the user generated call destination information. This prefix code is used, for example, for routing via a selected conventional telephone network after the call has been directed via a selected cellular network. Dependent Claim 90 includes similar features.

In addition, dependent Claim 8 is directed to the method of Claim 1 wherein the prefix code includes a customer identification field containing user specific identification data. For example, the prefix code may include a customer reference 52 as shown in Figure 4 and as described at page 13, line 14 to page 14, line 6. Dependent Claim 50 includes similar features.

Further, dependent Claim 9 of the application is directed to a charging information field (e.g., control reference 51 in Figure 4, as described at page 12, lines 18-22) in the prefix code. Dependent Claim 51 includes similar features.

In addition, dependent Claims 13-16 are directed to a method that includes, in part, storing a routing table (e.g., LUT 1000) in a portable storage medium (e.g., SIM card 505) removably installed in the mobile telephone, for example, as shown in Appellant's Figure 10 and as described in the specification at page 30, lines 6-21. Dependent Claims 55-58 include similar features.

In addition, dependent Claims 18-21 are directed to a method that includes, in part, utilizing a routing table (e.g., routing table 1101), carrier selection table (e.g., carrier selection table 1102) and a carrier access table (e.g., carrier access table 1103). An example of such features are further shown in Figure 11 and described at page 31, line 27 to page 32, line 21. Dependent Claims 59-62 include similar features.

# VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL UNDER 37 C.F.R. § 41.37(c)(1)(vi)

A) Claims 1-9, 11-26, 30, 31, 36-39, 44 and 45 were finally rejected under 35 U.S.C. § 103(a) as anticipated by Lorimer (EP 0724371 A1) in view of U.S. Patent No. 6,138,010 to Rabe et al. (herein "Rabe"); Claims 27-29, 68, 69 and 76 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Lorimer in view of Rabe and U.S. Patent No. 6,427,076 to Skog; Claims 32-35 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Lorimer in view of Rabe and U.S. Patent No. 6,014,546 to Georges et al. (herein "Georges"); Claims 40-43, 46 and 47 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Lorimer in view of Rabe and U.S. Patent No. 6,122,263 to Dahlin et al. (herein "Dahlin");

B) Claims 48-51, 53-67, 70, 71, 74-77 and 79-82 were finally rejected under 35 U.S.C. § 103(a) as anticipated by <u>Lorimer</u> in view of <u>Rabe</u>; Claims 68, 69 and 76 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Lorimer</u> in view of <u>Rabe</u> and <u>Skog</u>;

Claims 72 and 73 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Lorimer in view of Rabe and U.S. Patent No. 6,122,263 to <u>Dahlin</u>; and

C) Claims 83 and 85-88 were finally rejected under 35 U.S.C. § 103(a) as anticipated by Lorimer in view of Rabe.

#### VII. ARGUMENT UNDER 37 C.F.R. § 41.37(c)(1)(vii)

A. The method of Claim 1 is not taught or suggested by Lorimer and Rabe, in combination with Skog, Georges or Dahlin.

1. Lorimer and Rabe fail to teach or suggest operation in a communication system with plural service providers having alternative communications channels and selecting from those channels.

Appellant respectfully submits that the rejection of Claim 1 under 35 U.S.C § 103(a) as anticipated by Lorimer in view of Rabe is in error regarding the characterization of Lorimer as teaching a method of operating a mobile telephone in a cellular telephone communications system in which a plurality of service providers provide respective alternative communications channels.

Lorimer only describes selecting between a number of different cellular telephone communications systems, referred to by Lorimer as networks. Lorimer illustrates this selection with the example at page 3, lines 28 to 40, in the context of a mobile telephone user in Europe who may select between DECT, DCS and GSM Networks (see references 6, 7 and 8 in Lorimer's Figure 1). However, Lorimer does not address a problem of selection between multiple channels available within a particular system where the channels correspond to different service providers. For example, Lorimer does not address a selection between Vodafone and Orange channels available within a given GSM cellular telephone system.

Similarly, Rabe describes a portable multi-mode radio telephone which selects from a

plurality of communications systems.<sup>1</sup> Further, <u>Rabe</u> indicates the different systems need not even be cellular networks, and for example the different systems may include satellite communications systems.<sup>2</sup>

Thus, <u>Lorimer</u> and <u>Rabe</u> describe multi-mode devices capable of operating with different types of communications systems, but do not describe operating a single cellular telecommunications system with multiple channels provided within the architecture of that single system for services provided by multiple service providers. Hence, <u>Lorimer</u> and <u>Rabe</u> completely fail to teach or suggest "selecting from those available channels of said cellular telephone communications system," as recited in independent Claim 1.

Accordingly, it is respectfully submitted that the rejection of Claim 1 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should be reversed.

2. Lorimer and Rabe fail to teach or suggest the feature of attempting to complete a registration procedure for each available channel, as required by Claim 1.

In addition, the rejection of Claim 1 under 35 U.S.C. § 103(a) as anticipated by

Lorimer and Rabe is also in error because those references do not teach or suggest

completing a registration procedure for each available channel within the cellular telephone

communications system.

Lorimer describes registering with only one available system and re-registering with another system at the point of making a call, if this will provide a preferred rate. Rabe, on the other hand, describes registering with as many systems as possible. However, Rabe indicates the "maximum possible" systems is dictated by the number of circuits provided, and in the described embodiment this number is only two, a circuit for the GSM cellular network

<sup>&</sup>lt;sup>1</sup> Rabe at column 3, lines 40-43.

<sup>&</sup>lt;sup>2</sup> Rabe at column 3, lines 18-32.

<sup>&</sup>lt;sup>3</sup> Rabe at column 8, lines 16-17.

and a circuit for the Iridium satellite system.<sup>4</sup> Further, for each system, <u>Rabe</u> only makes one registration. For example, <u>Rabe</u> indicates that in the GSM system, registration with only one channel is possible. Therefore, <u>Rabe</u> also fails to teach or suggest "attempting to complete a registration procedure for each available channel," as recited in Claim 1.

Accordingly, it is respectfully submitted that the rejection of Claim 1 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should also be reversed for the reasons discussed above.

# 3. Lorimer and Rabe fail to teach or suggest storing preferred route codes that comprise results of a route selection decision by a remote control centre.

The rejection of Claim 1 under 35 U.S.C. § 103(a) as anticipated by <u>Lorimer</u> in view of <u>Rabe</u> is further in error because those references also fail to teach or suggest a mobile telephone storing routing information in a look up table such that the table is populated with data in the form of preferred route codes that comprise results of a route selection decision by a control centre remote from the mobile telephone.

Lorimer only describes performing a system selection that is based on current tariff ratings specific to either a network or an individual user.<sup>5</sup> In other words, Lorimer indicates that raw data is stored on a handset, and a preferred route can be calculated by a processor of the handset using the stored data and an appropriate algorithm. Thus, according to Lorimer, the decision as to which system is preferred for a given call destination is made by the handset.<sup>6</sup>

Further, Appellant respectfully notes the approach of <u>Lorimer</u> places a disadvantageous burden on the mobile telephone processor because in <u>Lorimer</u> the preferred route processing is performed at the same time as other activities required for setting up a

<sup>5</sup> Lorimer at page 4, lines 5-9.

<sup>&</sup>lt;sup>4</sup> Rabe at column 9, line 17-30.

<sup>&</sup>lt;sup>6</sup> Lorimer at page 4, lines 24-26.

call. This extra processing is likely to contribute to an undesirable delay in setting up the call according to the system of <u>Lorimer</u>, and the user is likely to perceive this delay as a disadvantage of the system of <u>Lorimer</u>.

Similarly, <u>Rabe</u> indicates that a system supervisor of the mobile device performs a calculation to establish a system priority table based on raw data which includes, for example, relative cost of airtime. The system supervisor of the mobile device thereby selects a communications system to use for all calls, regardless of destination. Thus, according to <u>Rabe</u> the decision of system selection is made within the mobile device, and is not made by a remote control centre. Hence, Appellant submits that neither <u>Lorimer</u> nor <u>Rabe</u> teach or suggest "storing routing information in a look-up table of the mobile telephone . . . in the form of . . . preferred route codes [that] comprise results of a route selection decision by a control centre remote from the mobile telephone," as recited in Claim 1.

Moreover, the result of a combination of <u>Lorimer</u> and <u>Rabe</u> would require internal mobile phone processing to calculate a preference for making a selection for each outgoing call. Furthermore, the available selection would be between different available systems and would not provide a selection within a given cellular telephone communications system of a preferred communications channel provided by one of the available service providers within that system. Thus, the combination of <u>Lorimer</u> and <u>Rabe</u> also does not teach or suggest storing preferred route codes in the mobile telephone that "comprise the results of a mobile selection decision by a control centre remote from the mobile telephone," as recited in independent Claim 1.

Accordingly, it is respectfully submitted that the rejection of Claim 1 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should also be reversed for the reasons discussed above.

<sup>&</sup>lt;sup>7</sup> Rabe at column 9, lines 17-34.

4. Lorimer and Rabe fail to teach or suggest selecting one of the communication channels from the alternative communications channels within the cellular telephone communications system.

In addition, Appellant submits that the rejection of Claim 1 under 35 U.S.C. § 103(a) as anticipated by Lorimer in view of Rabe is also in error because these references fail to teach or suggest selecting one of the alternative communications channels within the cellular telephone communications system. In particular, although Rabe refers to monitoring control channels broadcast by base stations of the available communications systems, Rabe's indicated purpose for scanning is to identify communications systems matching the limited number of circuits (i.e., two) available in the device. Further, Lorimer does not make a distinction between channels provided by different service providers. Thus, Lorimer and Rabe each fail to teach or suggest "selecting from those available channels of said cellular telephone communications system," as recited in Claim 1.

Accordingly, it is respectfully submitted that the rejection of Claim 1 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should also be reversed for the reasons discussed above.

5. Skog, Georges and Dahlin also fail to teach or suggest the method of Claim 1.
Appellant respectfully submits that Skog, Georges and Dahlin, whether taken individually or in combination, also fail to teach or suggest the features of Claim 1 that are lacking in the disclosure of Lorimer and Rabe, as discussed above.

Accordingly, Appellant respectfully submits that the rejection of Claim 1 and claims depending therefrom, with respect to those references, should also be reversed.

### 6. The method of Claim 5 is also not taught or suggested by Lorimer.

Dependent Claim 5 further recites "the preferred route codes further determine a choice of a further network for forward connection." For example in Figure 1, after one of the cellular networks 8a, 8b or 8c is selected, routing to a destination telephone 2 is made via any one of a number of conventional telephone networks 5a, 5b and 5c. That routing information not only determines which of the cellular networks is selected but which of the conventional telephone networks is preferred.

Although the outstanding Office Action indicates that <u>Lorimer</u> at page 4, lines 10-35 is relevant, a careful review of that passage finds no reference to selection of a conventional telephone network for forward connection.

In addition, the disclosure of <u>Rabe</u> does not cure the deficiencies in the disclosure of <u>Lorimer</u>. It is therefore respectfully submitted that, for the additional reasons discussed above, dependent Claim 5 further patentably defines over the disclosures of <u>Lorimer</u> and Rabe.

# 7. The method of Claim 7 is also not taught or suggested by Lorimer.

Dependent Claim 7 further recites that "the mobile telephone adds a prefix code to the user generated call destination information." This prefix code is used, for example, for routing via a selected conventional telephone network after the call has been directed via a selected cellular network. The outstanding Office Action indicates that <u>Lorimer</u> discloses relevant subject matter at page 4, lines 5-14, however, <u>Lorimer</u> reveals no reference to such prefix codes in that passage.

In addition, <u>Rabe</u> does not cure these deficiencies in <u>Lorimer</u>. It is therefore respectfully submitted that, for the additional reasons discussed above, dependent Claim 7 further patentably defines over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

### 8. The method of Claim 8 is also not taught or suggested by Lorimer.

Dependent Claim 8 of the application recites that "the prefix code includes a customer identification field containing user specific identification data." The passages in <u>Lorimer</u> referred to in the Office Action, however, make no reference to any such customer identification field or equivalent feature.

In addition, <u>Rabe</u> does not cure these deficiencies in <u>Lorimer</u>. Accordingly, for the additional reason discussed above, Appellant respectfully submits that Claim 8 further patentably defines over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

#### 9. The method of Claim 9 is also not taught or suggested by Lorimer.

Dependent Claim 9 of the application is directed, in part, to a charging information field in the prefix code. However, the passages referred to in the Office Action in this respect do not make any reference to use of a prefix code added to the dialed telephone number.

Therefore, Lorimer makes no reference to any charging information field of an added prefix code.

In addition, <u>Rabe</u> does not cure that deficiency in <u>Lorimer</u>. Accordingly, for the additional reason discussed above, Appellant respectfully submits that Claim 9 further patentably defines over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

# 10. The methods of Claims 13-16 are also not taught or suggested by Lorimer.

Regarding dependent Claims 13-16, those claims further recite storing the routing table in a portable storage medium removably installed in the mobile telephone. As explained above, <u>Lorimer</u> does not make use of a look-up table as defined in accordance with the present invention. Therefore, Lorimer also does not teach or suggest storing the look-up

table in a portable storage medium. <u>Lorimer</u> however, stores raw unprocessed data in the form of tariff data in a SIM card of the telephone, which is not equivalent to storing the lookup table of the present invention.

In addition, <u>Rabe</u> does not cure that deficiency in <u>Lorimer</u>. Accordingly, for the additional reason discussed above, Appellant respectfully submits that Claims 13-16 further patentably define over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

# 11. The methods of dependent Claims 18-21 are also not taught or suggested by Lorimer.

Dependent Claim 18 further recites utilizing a routing table, carrier selection table, and a carrier access table. Lorimer on the other hand does not teach or suggest using any of these components. As explained above, the claimed routing table contains the preferred route codes, which are the result of a calculation as to the optimum selected route, the calculation having been made remotely and the results downloaded for storage in a look-up table within the mobile telephone.

In contrast, the cited passages of <u>Lorimer</u> indicate that raw unprocessed data including tariff data is stored within the telephone and periodically updated. At the time of making a call, the processor within the mobile telephone runs an algorithm to which this data is input along with other parameters to allow a calculation to be performed within the telephone. It is submitted that <u>Lorimer</u> does not use a routing table containing the preferred route codes since it is necessary for the processor within the telephone on <u>Lorimer</u> to perform a calculation to arrive at the preferred route.

Similarly, dependent Claim 18 further recites utilizing a carrier selection table. For each preferred route code, a limit is provided in order of priority to determine the carrier selection to be used. A carrier access table then contains for each carrier selection the

required channel selection and prefix code to be added to the dialed number. No corresponding features can be found in the disclosure of <u>Lorimer</u>.

Similarly, the features of dependent Claims 19-21 have no counterpart in <u>Lorimer</u> because Lorimer does not use a look-up table scheme but relies on calculation from raw data.

In addition, <u>Rabe</u> does not cure these deficiencies in <u>Lorimer</u>. Accordingly, for the additional reasons discussed above, Appellant respectfully submits that dependent Claims 18-21 further patentably define over the disclosure of <u>Lorimer</u> and <u>Rabe</u>.

- B. The mobile telephone of Claim 48 is not taught or suggested by Lorimer and Rabe, in combination with Skog, Georges or Dahlin.
- 1. Lorimer and Rabe fail to teach or suggest a mobile telephone having channel selecting means for selecting from alternative communication channels in a system with plural service providers having alternative communications channels.

Appellant respectfully submits that the rejection of Claim 48 under 35 U.S.C § 103(a) as anticipated by <u>Lorimer</u> in view of <u>Rabe</u> is in error regarding the characterization of <u>Lorimer</u> as teaching a mobile telephone having channel selecting means for selecting one of the communications channels in a cellular telephone communications system in which a plurality of service providers provide respective alternative communications channels.

Lorimer only describes selecting between a number of different cellular telephone communications systems, referred to by Lorimer as networks. Lorimer illustrates this selection with the example at page 3, lines 28 to 40, in the context of a mobile telephone user in Europe who may select between DECT, DCS and GSM Networks (see references 6, 7 and 8 in Lorimer's Figure 1). However, Lorimer does not address a problem of selection between multiple channels available within a particular cellular telephone communications system where the channels correspond to different service providers. For example, Lorimer does not teach or suggest a selection between Vodafone and Orange channels available within a given GSM cellular telephone system.

Similarly, <u>Rabe</u> describes a portable multi-mode radio telephone which selects from a plurality of communications systems. Further, <u>Rabe</u> indicates the different systems need not even be cellular networks, and for example the different systems may include a satellite communications system. Thus, the systems of <u>Lorimer</u> and <u>Rabe</u> describe multi-mode devices capable of operating with different types of communications systems, but do not describe operating a single cellular telecommunications system with multiple channels provided within the architecture of that single system for services provided by multiple service providers. Hence, <u>Lorimer</u> and <u>Rabe</u> completely fail to teach or suggest "selecting from those available channels of said cellular telephone communications system," as recited in independent Claim 48.

Further, Appellant respectfully submits that <u>Lorimer</u> and <u>Rabe</u> fail to teach or suggest any selector means such as the selector 133 of Appellant's Figure 3, which shows an example of a selector means that receives inputs from clock 139, calendar 141 and input device 130 and performs a selection between look-up tables 1 and 2 134/135.

Accordingly, it is respectfully submitted that the rejection of Claim 48 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should be reversed.

2. Lorimer and Rabe fail to teach or suggest the feature of attempting to complete a registration procedure for each available channel required by Claim 48.

In addition, the rejection of Claim 48 under 35 U.S.C. § 103(a) as anticipated by Lorimer and Rabe is also in error because those references do not teach or suggest scanning means for attempting to complete a registration procedure for each available channel within the cellular telephone communications system.

<sup>&</sup>lt;sup>8</sup> Rabe at column 3, lines 40-43.

<sup>&</sup>lt;sup>9</sup> Rabe at column 3, lines 18-32.

Lorimer describes registering with only one available system and re-registering with another system at the point of making a call if this will provide a preferred rate. Rabe, on the other hand, describes registering with as many systems as possible. 10 However, Rabe indicates the "maximum possible" is dictated by the number of circuits provided, and in the described embodiment this number is only two, a circuit for the GSM cellular network and a circuit for the Iridium satellite system. 11 Further, for each system, Rabe only makes one registration. For example, Rabe indicates that in the GSM system, registration with only one channel is possible, and therefore does not disclose "scanning means for attempting to complete a registration procedure for each available channel," as recited in Claim 48.

In addition, Lorimer and Rabe fail to teach or suggest a scanning means such as the example of a scanning means shown in Figure 5, which includes, in part, CPU 500, and RAM 502 having LUTs 134/135 storing routing information.

Accordingly, it is respectfully submitted that the rejection of Claim 48 and claims depending therefrom as being anticipated by Lorimer and Rabe should also be reversed for the reasons discussed above.

3. Lorimer and Rabe fail to teach or suggest a look up table storing preferred route codes that comprise results of a route selection decision by a remote control centre.

The rejection of Claim 48 under 35 U.S.C. § 103(a) as anticipated by Lorimer in view of Rabe is further in error because those references also fail to teach or suggest a mobile telephone having a look up table storing routing information such that the table is populated with data in the form of preferred route codes that comprise results of a route selection decision by a control centre remote from the mobile telephone.

<sup>&</sup>lt;sup>10</sup> <u>Rabe</u> at column 8, lines 16-17. <u>Rabe</u> at column 9, line 17-30.

<u>Lorimer</u> only describes performing a system selection that is based on current tariff ratings specific to either a network or an individual user.<sup>12</sup> In other words, <u>Lorimer</u> indicates that raw data is stored on a handset, and a preferred route can be calculated by a processor of the handset using the stored data and an appropriate algorithm. Thus, according to <u>Lorimer</u>, the decision as to which system is preferred for a given call destination is made by the handset, and is therefore not made at a remote control centre.<sup>13</sup>

Further, Appellant respectfully notes the approach of <u>Lorimer</u> places a disadvantageous burden on the mobile telephone processor, because in <u>Lorimer</u> the preferred route processing is performed at the same time as other activities required for setting up a call. This extra processing is likely to contribute to an undesirable delay in setting up the call according to the system of <u>Lorimer</u>, and the user is likely to perceive this delay as a disadvantage of the system of <u>Lorimer</u>.

Similarly, <u>Rabe</u> indicates that a system supervisor of the mobile device performs a calculation to establish a system priority table based on raw data which includes, for example, relative cost of airtime. The system supervisor of the mobile device thereby selects a communications system to use for all calls, regardless of destination. <sup>14</sup> Thus, according to <u>Rabe</u> the decision of system selection is made within the mobile device. Hence, Appellant submits that neither <u>Lorimer</u> nor <u>Rabe</u> teach or suggest "a look-up table storing routing information such that the table is populated with data in the form of preferred route codes [that] comprise results of a route selection decision by a control centre remote from the mobile telephone," as recited in Claim 48.

Moreover, the result of a combination of <u>Lorimer</u> and <u>Rabe</u> would require an internal mobile phone processing capability to calculate a preference for making a selection for each

<sup>&</sup>lt;sup>12</sup> Lorimer at page 4, lines 5-9.

Lorimer at page 4, lines 24-26.

<sup>&</sup>lt;sup>14</sup> Rabe at column 9, lines 17-34.

outgoing call. Furthermore, the available selection would be between different available systems and would not provide a selection within a given cellular telephone communications system of a preferred communications channel provided by one of the available service providers within that system. Thus, the combination of <u>Lorimer</u> and <u>Rabe</u> also does not teach or suggest storing preferred route codes in the mobile telephone that "comprise results of a route selection decision by a control centre remote from the mobile telephone," as recited in independent Claim 48.

Accordingly, it is respectfully submitted that the rejection of Claim 48 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should also be reversed for the reasons discussed above.

# 4. Lorimer and Rabe fail to teach or suggest channel selecting means for selecting one of the communication channels from those channels in which registration is completed.

In addition, Appellant submits that the rejection of Claim 48 under 35 U.S.C. § 103(a) as anticipated by Lorimer in view of Rabe is also in error because those references fail to teach or suggest channel selecting means for selecting one of the communication channels within the cellular telephone communications system. In particular, although Rabe refers to monitoring control channels broadcast by base stations of the available communications systems, Rabe's indicated purpose for scanning is to identify communications systems matching the limited number of circuits (i.e., two) available in the device. Further, Lorimer does not make a distinction between channels provided by different service providers. Thus, Lorimer and Rabe each fail to teach or suggest "selecting from those available channels of said cellular telephone communications system," as recited in Claim 48.

Further, Appellant respectfully submits that <u>Lorimer</u> and <u>Rabe</u> fail to teach or suggest any selector means such as the selector 133 of Appellant's Figure 3, which shows an example

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of a selector means that receives inputs from clock 139, calendar 141 and input device 130 and performs a selection between look-up tables 1 and 2 134/135.

Accordingly, it is respectfully submitted that the rejection of Claim 48 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should also be reversed for the reasons discussed above.

# 5. Skog, Georges and Dahlin also fail to teach or suggest the mobile telephone of Claim 48.

Appellant respectfully submits that <u>Skog</u>, <u>Georges</u> and <u>Dahlin</u>, whether taken individually or in combination, also fail to teach or suggest the features of Claim 48 that are lacking in the disclosures of <u>Lorimer</u> and <u>Rabe</u>, as discussed above.

Accordingly, Appellant respectfully submits that the rejection of Claim 48 and claims depending therefrom, with respect to those references, should also be reversed.

# 6. The mobile telephone of Claim 90 is also not taught or suggested by Lorimer.

Dependent Claim 90 further recites that the mobile telephone includes "code generating means for adding a prefix code to the user generated call destination information." This prefix code is used, for example, for routing via a selected conventional telephone network after the call has been directed via a selected cellular network. The outstanding Office Action indicates that <u>Lorimer</u> discloses relevant subject matter at page 4, lines 5-14, however, <u>Lorimer</u> reveals no reference to such prefix codes.

In addition, <u>Rabe</u> does not cure these deficiencies in <u>Lorimer</u>. It is therefore respectfully submitted that, for the additional reasons discussed above, dependent Claim 90 further patentably defines over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

### 7. The mobile telephone of Claim 50 is also not taught or suggested by Lorimer.

Dependent Claim 50 of the application recites "the prefix code includes a customer identification field containing user specific identification data." The passages in Lorimer referred to in the Office Action, however, make no reference to any such customer identification field or equivalent feature.

In addition, <u>Rabe</u> does not cure that deficiency in <u>Lorimer</u>. Accordingly, for the additional reason discussed above, Appellant respectfully submits that Claim 50 further patentably defines over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

8. The mobile telephone of Claim 51 is also not taught or suggested by Lorimer. Dependent Claim 51 of the application is directed, in part, to a charging information field in the prefix code. However, the passages referred to in the Office Action in this respect do not make any reference to use of a prefix code added to the dialed telephone number, and therefore, Lorimer makes no reference to any charging information field of the added prefix code.

In addition, <u>Rabe</u> does not cure these deficiencies in <u>Lorimer</u>. Accordingly, for the additional reasons discussed above, Appellant respectfully submits that Claim 51 further patentably defines over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

9. The mobile telephones of Claims 55-58 are also not taught or suggested by Lorimer.

Regarding dependent Claims 55-58, those claims further recite mobile telephones configured to store the routing table in a portable storage medium removably installed in the mobile telephone. As explained above, <u>Lorimer</u> does not make use of a look-up table as defined in accordance with the present invention. Therefore, <u>Lorimer</u> also does not teach or suggest storing the look-up table in a portable storage medium. <u>Lorimer</u> however, stores raw

unprocessed data in the form of tariff data in a SIM card of the telephone, which is not equivalent to storing the look-up table of the present invention.

In addition, <u>Rabe</u> does not cure these deficiencies in <u>Lorimer</u>. Accordingly, for the additional reasons discussed above, Appellant respectfully submits that Claim 55-58 further patentably define over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

# 10. The mobile telephones of dependent Claims 59-62 are also not taught or suggested by Lorimer.

Dependent Claim 59 further recites utilizing a routing table, carrier selection table, and a carrier access table. Lorimer on the other hand utilizes none of these components. As explained above, the claimed routing table contains the preferred route codes, which are the result of a calculation as to the optimum selected route, the calculation having been made remotely and the results downloaded for storage in a look-up table within the mobile telephone.

In contrast, the cited passages of <u>Lorimer</u> indicate that raw unprocessed data including tariff data is stored within the telephone and periodically updated. At the time of making a call, the processor within the mobile telephone runs an algorithm to which this data is input along with other parameters to allow a calculation to be performed within the telephone. It is submitted that <u>Lorimer</u> does not use a routing table containing the preferred route codes since it is necessary for the processor within the telephone on <u>Lorimer</u> to perform a calculation to arrive at the preferred route.

Similarly, dependent Claim 59 further recites utilizing a carrier selection table. For each preferred route code, a limit is provided in order of priority to determine the carrier selection to be used. A carrier access table then contains for each carrier selection the

required channel selection and prefix code to be added to the dialed number. No corresponding features can be found in the disclosure of <u>Lorimer</u>.

Likewise, the features of dependent Claims 59-62 have no counterparts in <u>Lorimer</u> because <u>Lorimer</u> does not use a look-up table scheme but relies on calculation from raw data.

In addition, <u>Rabe</u> does not cure these deficiencies in <u>Lorimer</u>. Accordingly, for the additional reasons discussed above, Appellant respectfully submits that dependent Claims 58-62 further patentably define over the disclosures of <u>Lorimer</u> and <u>Rabe</u>.

C. The portable storage medium for use in a mobile telephone recited in Claim 83 is not taught or suggested by Lorimer and Rabe.

1. Lorimer and Rabe fail to teach or suggest a portable storage medium that stores preferred route codes that comprise results of a route selection decision by a remote control centre.

The rejection of Claim 83 under 35 U.S.C. § 103(a) as anticipated by <u>Lorimer</u> in view of <u>Rabe</u> is further in error because those references also fail to teach or suggest a portable storage medium storing a look up table populated with data in the form of preferred route codes that comprise results of a route selection decision by a control centre remote from the mobile telephone.

Lorimer only describes performing a system selection that is based on current tariff ratings specific to either a network or an individual user. <sup>15</sup> In other words, Lorimer indicates that raw data is stored on a handset, and a preferred route can be calculated by a processor of the handset using the stored data and an appropriate algorithm. Thus, according to Lorimer, the decision as to which system is preferred for a given call destination is made by the handset. <sup>16</sup>

<sup>15</sup> Lorimer at page 4, lines 5-9.

<sup>&</sup>lt;sup>16</sup> Lorimer at page 4, lines 24-26.

Further, Appellant respectfully notes the approach of <u>Lorimer</u> places a disadvantageous burden on the mobile telephone processor because in <u>Lorimer</u> the preferred route processing is performed at the same time as other activities required for setting up a call. This extra processing is likely to contribute to an undesirable delay in setting up the call according to the system of <u>Lorimer</u>, and the user is likely to perceive this delay as a disadvantage of the system of <u>Lorimer</u>.

Similarly, <u>Rabe</u> indicates that a system supervisor of the mobile device performs a calculation to establish a system priority table based on raw data which includes, for example, relative cost of airtime. The system supervisor of the mobile device thereby selects a communications system to use for all calls, regardless of destination. Thus, according to <u>Rabe</u> the decision of system selection is made within the mobile device. Hence, Appellant submits that neither <u>Lorimer</u> nor <u>Rabe</u> teach or suggest "a portable storage medium for use in a mobile telephone. . . storing a look-up table populated with data in the form of . . . preferred route codes [that] comprise results of a route selection decision by a control centre remote from the mobile telephone," as recited in Claim 83.

Moreover, the result of a combination of <u>Lorimer</u> and <u>Rabe</u> would require internal mobile phone processing to calculate a preference for making a selection for each outgoing call. Furthermore, the available selection would be between different available systems and would not provide a selection within a given cellular telephone communications system of a preferred communications channel provided by one of the available service providers within that system. Thus, the combination of <u>Lorimer</u> and <u>Rabe</u> also does not teach or suggest storing preferred route codes in the mobile telephone that "comprise the results of a mobile selection decision by a control centre remote from the mobile telephone," as recited in independent Claim 83.

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<sup>&</sup>lt;sup>17</sup> Rabe at column 9, lines 17-34.

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Accordingly, it is respectfully submitted that the rejection of Claim 83 and claims depending therefrom as being anticipated by <u>Lorimer</u> and <u>Rabe</u> should also be reversed for the reasons discussed above.

### **CONCLUSION**

The rejections applied to Claims 1, 3-9, 11-48, 50, 51, 53-77, 79-83 and 85-88 should be reversed as being clearly improper under the controlling precedent cited above and for the above-noted reasons.

Respectfully submitted,

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## VII. CLAIMS APPENDIX 37 C.F.R. § 41.37(c)(1)(viii)

Claim 1: A method of operating a mobile telephone in a cellular telephone communications system in which a plurality of service providers provide respective alternative communications channels within said cellular telephone communications system, the method comprising:

storing routing information in a look-up table of the mobile telephone such that the table is populated with data in the form of preferred route codes, each preferred route code being representative of a preferred route for connection to a respective call destination, and wherein the preferred route codes comprise results of a route selection decision by a control centre remote from the mobile telephone;

originating an outgoing telephone call by the input of user generated call destination information;

accessing the look-up table using an address determined at least in part by the call destination information to obtain a selected preferred route code;

selecting one of the communication channels in accordance with the preferred route code;

establishing communication for the outgoing telephone call for a call destination corresponding to the call destination information via the selected communication channel of a corresponding selected service provider; and

periodically scanning received transmissions to identify available communications channels for which the mobile telephone has functional capability and attempting to complete a registration procedure for each available channel,

wherein said selecting comprises selecting from those available channels of said cellular telephone communications system in respect of which registration is completed.

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Claim 3: A method as claimed in claim 2 wherein the decision is based at least in part on least-cost.

Claim 4: A method as claimed in claim 2 wherein the decision is based at least in part on performance of at least one network selected in accordance with the preferred route.

Claim 5: A method as claimed in claim 1 wherein the preferred route codes further determine a choice of a further network for forward connection between a network of the service provider of the selected communication channel and the call destination via the further network.

Claim 6: A method as claimed in claim 5 wherein the control centre collates billing information in respect of services provided by the service provider and one or more further service providers of the further networks in facilitating the making of the call to the call destination.

Claim 7: A method as claimed in claim 5 wherein the mobile telephone adds a prefix code to the user generated call destination information.

Claim 8: A method as claimed in claim 7 wherein the prefix code includes a customer identification field containing user specific identification data.

Claim 9: A method as claimed in of claim 7 wherein the prefix code includes a charging information field for identifying a control entity to be billed by one or more service providers corresponding to the selected network connection route.

Claim 11: A method as claimed in claim 1 further comprising electing from the available channels a home channel for receipt of incoming calls.

Claim 12: A method as claimed in claim 1 further comprising electing from the available channels in respect of which registration is completed an update receiving channel for receipt of updating information broadcasts.

Claim 13: A method as claimed in claim 1 wherein the look-up table is stored in a portable storage medium removably installed in the mobile telephone.

Claim 14: A method as claimed in claim 13 wherein the storage medium is a smart card.

Claim 15: A method as claimed in claim 13 wherein the portable storage medium is a SIM (subscriber identity module) card which also stores subscriber specific data for identification and authentication purposes.

Claim 16: A method as claimed in claim 13 wherein the look-up table is populated with an initial set of data before installation of the storage medium in the mobile telephone.

Claim 17: A method as claimed in claim 1 further comprising periodically updating the data stored in the look-up table by receiving data blocks each containing a respective portion of updated data and, for each received data block, overwriting a corresponding portion of the existing data with updated data from the received block.

Claim 18: A method as claimed in claim 1 wherein the look-up table comprises: a routing table containing the preferred route codes;

a carrier selection table containing, for each preferred route code, a list in order of priority of carrier selections to be used, subject to availability; and

a carrier access table containing, for each carrier selection, a channel selection identifying a communications channel provided by a service provider of the mobile telephone system and a prefix code to be added to the dialed number identifying a further network for routing the call.

Claim 19: A method as claimed in claim 18 wherein the look-up table further comprises a carrier availability table containing information indicating which of the channels are currently available.

Claim 20: A method as claimed in claim 19 wherein the accessing the look-up table comprises:

addressing the routing table to obtain a preferred route code;

using the preferred route code to address the carrier selection table to obtain a list of carrier selections;

addressing the carrier access table using the first carrier selection on the list to obtain the prefix code and channel selection data for the first channel selection; and addressing the carrier availability table using the channel selection data to determine if the first carrier selection is one of the available channels in respect of which registration is completed and, if so, initiating the call to the call destination using the prefix code via the channel selection data for the first carrier selection.

Claim 21: A method as claimed in claim 20 wherein, if the first carrier selection is determined not to be an available channel, the carrier availability table is addressed using channel selection data for a further carrier selection from the list and, if it is determined that the further carrier selection is an available channel, the call is initiated using the prefix code and channel selection data for the further carrier selection.

Claim 22: A method as claimed in claim 19 wherein the mobile telephone searches for available communications channels of the cellular telephone communications system and updates the carrier availability table accordingly.

Claim 23: A method as claimed in claim 1 wherein the look-up table comprises default route data and wherein if accessing the look-up table with the call destination information fails to locate corresponding data defining a preferred route code, the preferred route code is derived from the default route data.

Claim 24: A method as claimed in claim 1 wherein updating information for updating the look-up table is communicated to the mobile telephone via a selected one of the available communications channels.

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Claim 25: A method as claimed in claim 24 wherein the updating information is transmitted using an SMS (short message service) protocol.

Claim 26: A method as claimed in claim 24 wherein the updating information is transmitted as a multipoint broadcast to a plurality of mobile telephones.

Claim 27: A method as claimed in claim 1 wherein the updating information is transmitted to the mobile telephone as a web page.

Claim 28: A method as claimed in claim 27 wherein the web page is transmitted using Wireless Application Protocol.

Claim 29: A method as claimed in claim 27 wherein the mobile telephone processes the web page to extract updating information; stores the extracted updating information in a buffer memory; and updates the look-up table with updating information read from the buffer memory.

Claim 30: A method as claimed in claim 1 wherein the updating information is communicated to the mobile telephone by detachably connecting the mobile telephone to a docking station and transmitting the updating information to the mobile telephone via the docking station.

Claim 31: A method as claimed in claim 30 wherein the docking station is connected to receive a multipoint broadcast of updating information via a broadcast network.

- Claim 32: A method as claimed in claim 31 wherein the docking station receives updating information as signals multiplexed in a television transmission signal.
- Claim 33: A method as claimed in claim 32 wherein the signal is multiplexed in the vertical blanking interval of the television transmission signal.
- Claim 34: A method as claimed in claim 31 wherein the broadcasting network is an optical cable network.
- Claim 35: A method as claimed in claim 31 wherein the broadcasting network is a satellite television network.
- Claim 36: A method as claimed in claim 30 wherein the docking station is connected to a telephone line and updating information is received from the control centre in response to making a telephone call request to the control centre via the telephone line.
- Claim 37: A method as claimed in claim 36 wherein the docking station comprises a modem connected to the telephone line and which generates the telephone call request in response to user actuation of the docking station.
- Claim 38: A method as claimed in claim 36 wherein the mobile telephone comprises a modem connected to the telephone line via the docking station and which generates the telephone call request in response to user actuation of the mobile telephone.

Claim 39: A method as claimed in claim 30 wherein the mobile telephone comprises an internal battery which is recharged by detachably connecting the mobile telephone to the docking station.

Claim 40: A method as claimed in claim 1 wherein the preferred route code determines a route via a packet switched network and comprises network address information defining at least one node of the network which is to be included in the selected route.

Claim 41: A method as claimed in claim 40 wherein the network address information defines at least one further node of the network which is not to be included in the selected route.

Claim 42: A method as claimed in claim 40 wherein the outgoing telephone call is transmitted as a packetised signal using a protocol in which such signals include a start address indicator interpreted by the network as being representative of a network address from which the call originates and further comprising transmitting the outgoing telephone call including start address information defined by the preferred route code.

Claim 43: A method as claimed in claim 42 wherein the start address information is representative of a start address which is different from the actual start address of the outgoing telephone call in the network.

Claim 44: A method as claimed in claim 1 wherein the telephone call is originated to communicate data comprising a type of data selected from a set of alternative types of data.

Claim 45: A method as claimed in claim 44 wherein the set of alternative types of data comprises voice data, image data and data formatted in accordance with an Internet protocol.

Claim 46: A method as claimed in claim 43 wherein the look-up table stores respective preferred route codes for each of the types of data.

Claim 47: A method as claimed in claim 1 wherein the cellular telephone system comprises part of a packet switching network in which the mobile telephone constitutes a node of the network and wherein the call destination constitutes a further node of the network.

Claim 48: A mobile telephone for use in a cellular telephone communications system in which a plurality of service providers provide respective alternative communications channels within said cellular telephone communications system,

the mobile telephone comprising:

a look-up table storing routing information such that the table is populated with data in the form of preferred route codes, each preferred route code being representative of a preferred route for connection to a respective call destination, and wherein the preferred route codes comprise results of a route selection decision by a control centre remote from the mobile telephone;

input means for originating an outgoing telephone call by the input of user generated call destination information;

accessing means for accessing the look-up table using an address determined at least in part by the call destination information to obtain a selected preferred route code;

channel selecting means for selecting one of the communication channels in accordance with the preferred route code;

communication means for establishing communication for the outgoing telephone call for a call destination corresponding to the call destination information via the selected communication channel of a corresponding selected service provider; and

scanning means for periodically scanning received transmissions to identify available communications channels for which it has functional capability and for attempting to complete a registration procedure for each available channel,

wherein the channel selecting means is operable to perform selection from those available channels of said cellular telephone communications system in which registration is completed.

Claim 50: A mobile telephone as claimed in claim 90 wherein the prefix code includes a customer identification field containing user specific identification data.

Claim 51: A mobile telephone as claimed in claim 90 wherein the prefix code includes a charging information field for identifying a control entity to be billed by one or more service providers corresponding to the selected network connection route.

Claim 53: A mobile telephone as claimed in claim 48 further comprising electing means for electing from the available channels in respect of which registration is completed a home channel for receipt of incoming calls.

Claim 54: A mobile telephone as claimed in claim 53 wherein the electing means is further operable to elect from the available channels an update receiving channel for receipt of updating information broadcasts.

Claim 55: A mobile telephone as claimed in claim 48 wherein the look-up table is stored in a portable storage medium removably installed in the mobile telephone.

Claim 56: A mobile telephone as claimed in claim 55 wherein the storage medium is a smart card.

Claim 57: A mobile telephone as claimed in claim 55 wherein the portable storage medium is a SIM (subscriber identity module) card which also stores subscriber specific data for identification and authentication purposes.

Claim 58: A mobile telephone as claimed in claim 48 further comprising updating means for periodically updating the data stored in the look-up table by receiving data blocks each containing a respective portion of updated data and, for each received data block, overwriting a corresponding portion of the existing data with updated data from the received block.

Claim 59: A mobile telephone as claimed in claim 48 wherein the look-up table comprises:

a routing table containing the preferred route codes;

a carrier selection table containing, for each preferred route code, a list in order of priority of carrier selections to be used, subject to availability; and

a carrier access table containing, for each carrier selection, a channel selection identifying a communications channel provided by a service provider of the mobile telephone system and a prefix code to be added to the dialed number identifying a further network for routing the call.

Claim 60: A mobile telephone as claimed in claim 59 wherein the look-up table further comprises a carrier availability table containing information indicating which of the channels are currently available.

Claim 61: A mobile telephone as claimed in claim 60 wherein the accessing means comprises:

means for addressing the routing table to obtain a preferred route code;

means for using the preferred route code to address the carrier selection table to obtain a list of carrier selections;

means for addressing the carrier access table using the first carrier selection on the list to obtain the prefix code and channel selection data for the first channel selection; and

means for addressing the carrier availability table using the channel selection data to determine if the first carrier selection is one of the available channels in respect of which registration is completed and, if so, initiating the call to the call destination using the prefix code via the channel selection data for the first carrier selection.

Claim 62: A mobile telephone as claimed in claim 61 wherein, if the first carrier selection is determined not to be an available channel, the means for addressing the carrier availability table is operable to address the table using channel selection data for a further carrier selection from the list and, if it is determined that the further carrier selection is an

available channel, to initiate the call using the prefix code and channel selection data for the further carrier selection.

Claim 63: A mobile telephone as claimed in claim 60 further comprising means for searching for available communications channels of the cellular telephone communications system and means for updating the carrier availability table accordingly.

Claim 64: A mobile telephone as claimed in claim 48 wherein the look-up table comprises default route data and wherein the accessing means is operable, if accessing the look-up table with the call destination information fails to locate corresponding data defining a preferred route code, to derive preferred route code from the default route data.

Claim 65: A mobile telephone as claimed in claim 48 further comprising means for extracting updating information for updating the look-up table from signals communicated to the mobile telephone via a selected one of the available communications channels.

Claim 66: A mobile telephone as claimed in claim 65 wherein the updating information is extracted from signals encoded using an SMS (short message service) protocol.

Claim 67: A mobile telephone as claimed in claim 66 wherein the extracting means is operable to extract the updating information from data transmitted to the mobile telephone as a web page.

Claim 68: A mobile telephone as claimed in claim 67 wherein the extracting means extracts updating information from the web page using Wireless Application Protocol.

Claim 69: A mobile telephone as claimed in claim 67 wherein the extracting means comprises a processor operable to process the web page to extract updating information; store the extracted updating information in a buffer memory; and update the look-up table with updating information read from the buffer memory.

Claim 70: A mobile telephone as claimed in claim 48 further comprising connecting means operable to detachably connect the mobile telephone to a docking station and an interface for receiving the updating information transmitted in use to the mobile telephone via the docking station.

Claim 71: A mobile telephone as claimed in claim 70 co-operable in use with a docking station connected to a telephone line such that updating information is received from the control centre in response to making a telephone call request to the control centre via the telephone line; wherein the mobile telephone comprises a modem connectable in use to the telephone line via the docking station and which modem is operable to generate the telephone call request in response to user actuation of the mobile telephone.

Claim 72: A mobile telephone as claimed in claim 48 wherein the preferred route code determines a route via a packet switched network and comprises network address information defining in use at least one node of the network which is to be included in the selected route.

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Claim 73: A mobile telephone as claimed in claim 72 wherein the network address information defines in use at least one further node of the network which is not to be included in the selected route.

Claim 74: A mobile telephone as claimed in claim 72 further comprising means for transmitting the outgoing telephone call as a packetised signal using a protocol in which such signals include a start address indicator interpreted in use by the network as being representative of a network address from which the call originates and wherein the transmitting means is operable to transmit the outgoing telephone call including start address information defined by the preferred route code.

Claim 75: A mobile telephone as claimed in claim 48 and operable to output communications signals representative of a type of data selected from a set of alternative types of data.

Claim 76: A mobile telephone as claimed in claim 75 wherein the types of data comprise voice data, image data and data formatted in accordance with an Internet protocol.

Claim 77: A mobile telephone as claimed in claim 75 wherein the look-table stores respective preferred route codes for each of the types of data.

Claim 79: A docking station as claimed in claim 77 operable to receive a broadcast of updating information via a broadcast network and further comprising a decoder for decoding signals multiplexed in the vertical blanking interval of a television transmission signal.

Claim 80: A docking station as claimed in claim 77 further comprising means for receiving updating information via a telephone line.

Claim 81: A docking station as claimed in claim 80 further comprising a modem.

Claim 82: A docking station as claimed in claim 81 further comprising means for initiating the generation of a telephone call via the telephone line requesting the transmission of updating information.

Claim 83: A portable storage medium for use in a mobile telephone, the storage medium storing a look-up table populated with data in the form of preferred route codes, each preferred route code being representative of a preferred route for connection to a respective call destination, wherein the preferred route codes comprise results of a route selection decision by a control centre remote from the mobile telephone.

Claim 85: A computer program comprising processor implementable instructions for carrying out a method of operating a mobile telephone as claimed in claim 1.

Claim 86: A storage medium storing processor implementable instructions for carrying out a method of operating a mobile telephone as claimed in claim 1.

Claim 87: A communications signal comprising processor implementable instructions for carrying out a method of operating a mobile telephone as claimed in claim 1.

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Claim 88: A communications signal comprising route selecting information contained in an outgoing telephone call signal in accordance with a method as claimed in claim 1.

Claim 90: A mobile telephone as claimed in claim 48 further comprising code generating means for adding a prefix code to the user generated call destination information.

# IX. EVIDENCE APPENDIX UNDER 37 C.F.R. § 41.37(c)(1)(ix)

None.

X. <u>RELATED PROCEEDINGS APPENDIX UNDER 37 C.F.R. § 41.37(c)(1)(x)</u> None.